



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/752,721 | 01/03/2001 | Bum Joo Seo | 0465-0795P-SP | 1215 |
| 2292 | 7590 | 09/10/2004 | EXAMINER | |
| BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747 | | | VENT, JAMIE J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2616 | |

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|--|--------------------------------------|-------------------------------------|--|
| <p align="center">Office Action Summary</p> | Application No. 09/752,721 | Applicant(s) SEO, BUM JOO | |
| | Examiner Jamie Vent | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/3/01 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being unpatentable by Gordon et al (US 6,481,012).

[claim 1]

In regard to Claim 1, Gordon et al, discloses a method for supporting a picture-in-picture (PIP) type time shifting comprising:

- a first display step of receiving a plurality of broadcasting programs received through a broadcasting network, and displaying the respective live broadcasting programs through a PIP structure on the screen (Figure 11a shows the display of the real time broadcast programs (1004, 1006, and 1008) received from a broadcast network such as a cable television (Column 1 Lines 25-30);

- a second display step of selectively storing in a storage section one among the plurality of broadcasting programs displayed at the first display step, and selectively reproducing the stored broadcasting program through the time shifting to display the stored broadcasting program on the screen (Figure 14 shows the memory 1476 which stores the program that is selected to be stored as described in Column 13 Lines 48-56); and
- a third display step of displaying through the PIP structure on the screen a plurality of currently received other live broadcasting programs simultaneously with the second display step (Figure 27 shows real time/live broadcast (ChA-ChF) which are simultaneously displayed).

[claim 2]

In regard to Claim 2, Gordon et al discloses a third display step further comprising the step of removing the picture of the selected broadcasting program reproduced through the time shifting, and displaying the plurality of the currently received live broadcasting programs through the PIP (Figure 28 shows the selection of a real time/live broadcast which is reproduced as described in Column 14 Lines 10-20 and further displayed with the plurality of currently received programs as seen in Figure 32 which shows the method of displaying the various broadcast signals).

[claim 3]

In regard to Claim 3, Gordon et al discloses a method wherein the third display step further comprises the steps of:

- removing the corresponding live broadcasting program currently received and storing the corresponding live broadcasting program in the storage section (Figure 23a shows the object of each corresponding real time and non real time program to be displayed through the PIP while 23b shows the object and slice

information that is stored from each program thereby further showing in Figure 31 the removing of the desired program and storing the section as described in Column 14 Lines 20+);

- reproducing the stored corresponding broadcasting program (Column 14 lines 10-20 describes the recording functions that are available to the user and further describes the reproducing of the broadcasting program); and
- displaying the currently received live broadcasting program and the reproduced broadcasting program through the PIP structure on the screen (Figure 29 shows the method of displaying the live broadcast program which is selected for reproducing while Figure 27 shows the PIP display to the user).

[claim 4]

In regard to Claim 4, Gordon et al discloses an apparatus for supporting a PIP type time shifting comprising:

- an NTSC/PAL encoding section for compressing and encoding an analog broadcasting signal received through a broadcasting network (Figure 2 shows encoding unit 216 which encodes the analog broadcast signal as further described in Column 4 Lines 42+);
- a demux section for selecting one of the analog broadcasting signal outputted from the NTSC/PAL encoding section and a digital broadcasting signal inputted through the broadcasting network (Figure 14 transport demux 1430 describes the selection of the broadcast signal from the demodulator circuit as further described in Column 13 Lines 31-40);
- a packet identifier (PID) filter section for filtering a plurality of TP stream packets to discriminate packets which coincide with packet identifiers (PIDs) desired to be

recorded (Figure 14 PID filter 1404 filters through the TP stream packets to choose desired content as described in Column 14 Lines 20+);

- storage section interface for enabling the TP stream packet selectively filtered through the PID filter section to be stored in a storage device with desired information added thereto and for enabling the desired TP stream among the TP streams stored in the storage device to be searched and read out (Figure 14 shows a memory 1476 which is used for a storage section of items that are filtered through the PID filter section as described in Column 13 Lines 50+ and Column 14 Lines 1-30); and
- a remux section for supporting a PIP function by selecting the desired stream among the TP stream packets transmitted for a live broadcast or the TP stream packets read out from the storage device, and converting the selected stream into the TP stream packets (Figure 25 remux 2506 supports the PID function by selecting the TP stream packets as further described in Column 22 Lines 58+).

[claim 5, 6, & 7]

In regard to Claims 5, 6, and 7, Gordon et al discloses an apparatus wherein live PIP reproduction of all the inputted TP stream packets, the PID filter section, the storage section interface, and the remux section are all defined to be in a disable/enable state (Column 26 Lines 10-20 describes the disable state of the input TP stream packets, PID filter section, storage section and remux section when non-real time content source is processed and thereby no reproduction is present and the various components of the apparatus is disabled. Column 26 Lines 20-58 further describes the above listed components to be in an enable state when real-time content source is being processed and thereby reproduction is taking place in the system).

[claim 8]

Art Unit: 2616

In regard to Claim 8, Gordon et al discloses an apparatus wherein the PIDs of the TP stream packets have different values from one another (Figure 3 shows the various different unique values of the PIDs.)

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Choi (5,239,420).

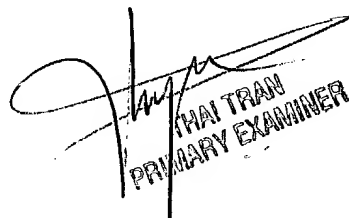
Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamie Vent whose telephone number is 703-305-0378. The examiner can normally be reached on 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 703-305-4725. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jamie Vent


THAI TRAN
PRIMARY EXAMINER